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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/229,046	01/12/1999	MICHAEL G. COUTTS	7890	7721

7590

04/22/2004

MICHAEL CHAN
NCR CORPORATION LAW DEPARTMENT
INTELLECTUAL PROPERTY SECTION ECD 2
101 WEST SCHANTZ AVENUE
DAYTON, OH 454790001

EXAMINER

TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 04/22/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/229,046

Applicant(s)

COULTS ET AL.

Examiner

Saba Tsegaye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-147 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-147 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7.8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 25 and 104 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 16 and 103 respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9, 13-19, 20-24, 26-52, 54, 55, 61-82, 91-98, 106-112, 116-121, 136, 138-142, 144 and 145 are rejected under 35 U.S.C. 102(e) as being anticipated by Korman et al. (US 6,308,887).

Regarding claim 1, Korman discloses, in Fig. 1, a communications network comprising a plurality of interconnected network sites (120, 0, 40, 60), at least one network site being a transaction terminal (10), wherein intelligent agent programs are used to convey information

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between sites on the network for facilitating efficient maintenance of the transaction terminal (column 3, line 39-column 4, line 48).

Regarding claim 2, Korman discloses a network, wherein each transaction terminal has an intelligent agent handler for receiving intelligent agents from the network and for launching intelligent agents into the network, wherein the agent handler allows a received intelligent agent to execute within the context of the handler (column 9, lines 11-50).

Regarding claims 3 and 31, Korman discloses a method, comprising the further step of collecting site address information from visiting agent programs (column 10, lines 8-12).

Regarding claim 4, Korman discloses a network according to claim 1, wherein each transaction terminal includes operation monitoring facilities that record operating information associated with service elements within that terminal (column 9, lines 51-56).

Regarding claims 5-8, Korman discloses a network, wherein one network site in the communications network includes a server which provides transaction processing capabilities for one or more transaction terminals; wherein the server has a monitor for sending out monitor intelligent agent programs for collecting and storing operating information from each of the available transaction terminals; and wherein the monitor includes facilities that analyze the operating information and predict when a transaction terminal may require maintenance (column 9, lines 51-65) .

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Regarding claims 13 and 14, Korman discloses a transaction terminal for use in an automatic maintenance requesting communications network, where the transaction terminal (10) comprises: an intelligent agent handler (40); operation monitoring facilities that detect malfunctions; and a service agent registry; whereby, in use, the intelligent agent handler (40) receives and executes intelligent agent service programs which store maintainer information and maintenance terminal information in the service agent registry, so that on detecting a malfunction the operation monitoring facilities are able provide the handler with information relating to one or more maintainers from the service agent registry for use in creating an intelligent agent alert program for sending to the one or more maintainers (column 9, line 50-column 10, line 5)

Regarding claims 9, 15, 16, 20, 25 and 28, Korman discloses, in Fig. 2, a transaction terminal (10) for use with a communications network, the terminal comprising: one or more service elements (120-230); operation monitoring facilities that record operating information associated with the one or more service elements (40); an I/O network interface; and an intelligent agent handler for receiving an intelligent agent via the I/O interface and for sending the received intelligent agent to the next destination (column 6, lines 46-53); whereby, the received intelligent agent is executed by the handler so that the received intelligent agent retrieves and stores operating information from the operation monitoring facilities (column 4, lines 56-66; column 7, lines 54- column 9, line 10).

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Regarding claims 17, 26, and 29, Korman discloses a communication network, wherein the data processor is programmed to launch an intelligent agent program by re-addressing a visiting agent program to which the operating data has been added (column 8, lines 51-65).

Regarding claims 18, 27 and 30, Korman discloses a communications network, wherein the data processor is programmed to launch an intelligent agent program in the form of an alert program which has been generated at the said terminal network site to carry the operating data (column 9, lines 51-67; column 11, lines 39-51).

Regarding claim 21, Korman discloses a communications network, wherein at least one of the terminal network sites comprises self-service cash dispensing terminal site (column 4, lines 49-66).

Regarding claim 22, Korman discloses a communications network, wherein at least one of the terminal network sites comprises a retail point of sale terminal site (column 4, lines 49-66).

Regarding claim 23, Korman discloses a communications network, wherein at least one of the terminal network sites comprises a self-service terminal site (column 4, lines 49-66).

Regarding claims 19 and 24, Korman discloses a communications network, further including a monitor network site, which includes:

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a data processor to launch agent programs to visit the terminal network site or sites so as to collect operating data therefrom for return to the monitor network site (column 9, lines 11-16), and

a monitoring data registry to register the operating data returned to the monitor network site (column 9, lines 11-50).

Regarding claims 32 and 33, Korman discloses a method of servicing an electronic device interconnected over a network that includes sending a registration message to the device over the network when an authorized service representative logs on to the network, informing the device of the network address of the service representative, and storing the address within the device to enable notification to be sent to the service representative in the event of a designated operating condition (column 10, lines 1-12).

Regarding claims 34-46, Korman discloses an intelligent alert agent (40) computer program that facilitates servicing of an electronic device by authorized service representatives having terminals interconnected with the device over a network, and that includes data in the form of priority information indicating a preferred order in which the service representatives are to be notified if a designated operating condition occurs within the electronic device, and operating by being transmitted to the terminal of the preferred service representative when the designated operating condition occurs, executing on the receiving terminal, initiating an alert as to the existing condition of the device, and transferring itself to the terminal of the next preferred

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service representative if within an allotted time period the first preferred service representative declines or fails to commit to perform the services required (column 9, lines 56-67).

Regarding claims 47 and 48, Korman discloses a networked peripheral module for a transaction processing terminal having a local data processor and agent handler logic that listens for incoming intelligent agent programs that gather servicing related data resident at the module for communication over the network (column 6, lines 46-55).

Regarding claims 49 and 50, Korman discloses a networked transaction-processing terminal having a local data processor and agent handler logic that launches intelligent agent programs for communication over the network of servicing related data resident at the terminal (column 6, lines 46-55; column 4, lines 35-42).

Regarding claims 51, 52, 54 and 55, Korman discloses a networked transaction processing terminal having a local data processor and Web server logic that communicates servicing related data resident at the terminal and made accessible to another networked terminal via a Web browser program (column 8, lines 3-12; column 6, lines 36-45).

Regarding claims 61-66, Korman discloses a system comprising a networked transaction terminal element and a servicing person's terminal interconnected via a wireless, a cellular telephone, a portable computing device, a laptop computer, a personal digital assistant computing device interconnection over a network, in which the transaction terminal element

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notifies the servicing person's terminal in the event of an error condition within the transaction terminal element (column 8, lines 41-50; column 10, lines 9-12).

Regarding claims 67-72, Korman discloses a networked transaction processing terminal having a local data processor and operation logic including a main class section that instantiates a logs class section programmed to store and provide access to servicing related data resident at the terminal, an embedded server class section that receives and responds to requests for the stored data made over the network, and an agent handler class section that provides the stored data to and launches intelligent agent programs outgoing onto the network; where the logs class section, the embedded server class section and the agent handler class section are separate logic components that may be readily added or removed in accordance with processing requirements at the terminal (column 7, lines 54-column 8, lines 65).

Regarding claims 73 and 74, Korman discloses a method of servicing an electronic device (10) interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the communication is automatically triggered by a service person's acceptance of responsibility for servicing a specified state condition that has occurred within the device (column 9, lines 51-67).

Regarding claims 75, 76 and 78, Korman discloses a method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the communication is triggered by a process initiated

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by a state condition within the device occurring and being communicated over the network by an alert agent program (column 9, lines 51-67; column 11, lines 39-51).

Regarding claims 77, 79 and 80, Korman discloses a method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the communication is triggered by a process initiated by a state condition within the device occurring and being communicated over the network by the device (column 9, lines 51-67; column 10, lines 19-21).

Regarding claims 81 and 82, Korman discloses, in Fig. 3, a system comprising a networked transaction terminal element (10) and two or more servicing persons' terminals (490) interconnected over a network, in which the transaction terminal element notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element (10), and in which a servicing person's terminal notifies the transaction terminal element in the event that the associated servicing person accepts responsibility for servicing the error condition (column 9, lines 51-67).

Regarding claims 91-98 and 145, Korman discloses, in Fig. 3, a system comprising a networked transaction terminal element (10), a central server (40) and two or more servicing persons' (490) terminals interconnected over a network, in which the transaction terminal element notifies the central server and the central server notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element (10), and in which the central server (40) provides further information concerning the error condition

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to a servicing person's terminal (490), to facilitate a decision as to whether a service person contacted will agree to accept responsibility for servicing the error condition that has occurred (column 9, line 11-column 10, line 5).

Regarding claims 106-112, Korman discloses a system comprising a networked transaction terminal element (10) and a servicing person's terminal (490) interconnected over a network, in which the servicing person's terminal is notified in the event of an error condition within the transaction terminal element (column 9, lines 51-65), and in which the transaction terminal element is notified via a network communication when the servicing person has serviced the error condition, to allow updating of a terminal element error condition registry (column 9, line 65-column 10 line 41).

Regarding claims 116-118, Korman discloses a system comprising networked transaction terminal elements and a central server interconnected over a network, in which the central server gathers state information from the transaction terminal elements by launching an intelligent agent program that successively visits and extracts information from transaction terminal elements and then returns to the central server with the extracted information (column 10, lines 45-58).

Regarding claims 119-121, Korman discloses a method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the servicing personnel are notified of servicing requirements in response to predictions based at least in part on information reported by the device in response to a query made over the network (column 9, lines 51-59).

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Regarding claim 138, Korman discloses a system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the central server is notified by the servicing person's terminal and the central server launches an intelligent agent program to notify one or more of the transaction terminal elements (column 9, line 51-column 10, line 5).

Regarding claims 136, 139 and 140, Korman discloses a system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the servicing person's terminal launches an intelligent agent program that first visits the central server where it acquires a list of network addresses and ports of transaction terminal elements to be visited, and then is launched to successively notify each of the transaction terminal elements represented on the list (column 10, lines 1-5).

Regarding claims 141, 142 and 144, Korman discloses a method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where notification that a critical error has occurred within the device is provided by an alert agent program running on the device, and where information concerning non-critical errors occurring within the device is provided in response to a query made through a regional or central server (column 7, lines 31-46; column 9, lines 51-67; column 11, lines 39-51).

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4. Claims 81-90, 99-105, 113-115 and 126-128 are rejected under 35 U.S.C. 102(e) as being anticipated by Sisley et al. (US 5,943,652).

Sisley discloses, in Fig. 1, a system comprising a networked transaction terminal element (18), a central server (12) and two or more servicing persons' terminals (Tech A-E) interconnected over a network, in which the transaction terminal element notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element (as in claims 81-90, 98-101, 103, 104, 113 and 126-128) (column 5, lines 45-63), and

a) in which a servicing person's terminal notifies the transaction terminal element in the event that the associated servicing person accepts responsibility for servicing the error condition (as in claims 81, 82, 99 and 101) (column 5, line 45-column 6, line 41; Fig. 6, steps 142, 144);

b) in which the intelligent agent program is programmed to return to transaction terminal element to provide notification of whether a service person has accepted responsibility for servicing the error condition (as in claims 83-85, 100, 113 and 126-128) (column 5, line 45-column 6, line 41);

c) in which the intelligent agent program is programmed is transmitted to a particular servicing persons' terminal as determined by a prioritized list of terminals to visit maintained by the program (as in claims 86, 103, 104, 128) (column 5, line 45-column 6, line 41; column 17, lines 61-67; column 21, lines 7-13);

d) in which the intelligent agent program is transmitted to a particular servicing persons' terminals in succession until within an allotted period of time one of the servicing persons visited accepts responsibility for servicing the error condition that has occurred (as in claims 87 and 88) (column 5, line 45-column 6, line 41);

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e) in which the intelligent agent program is programmed to continue to visit the various servicing persons' terminals in succession for a predetermined number of visits or until within an allotted period of time during a visit, a servicing person being visited accepts responsibility for servicing the error condition that has occurred (as in claims 89 and 90) (column 5, line 45-column 6, line 41).

Regarding claim 102, Sisley discloses a system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within the transaction terminal element, and in which a servicing person's estimate as to when the error condition is likely to be serviced is communicated to the central server (column 5, line 45-column 6, line 41; column 19, lines 17-47).

Regarding claim 105, Sisley discloses a system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within a transaction terminal element, and in which the central server makes proximity or availability based prioritization for service scheduling among the servicing persons on hand, where such prioritization is communicated to one or more of the transaction terminal elements to determine a visitation order for intelligent agent programs that a transaction terminal element may launch (column 5, line 45-column 6, line 41; column 17, line 64-column 18, line 2).

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Regarding claims 114 and 115, Sisley discloses a system comprising a networked transaction terminal element, a central server and a servicing person's terminal interconnected over a network, in which the transaction terminal element notifies the central server in the event a responsible service person fails to service an error condition within the transaction terminal element within an allotted period of time (column 5, line 64-column 6, line 15; column 6, lines 25-41).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-12, 53, 56-60, 122-125, 129-135, 137, 143, 146 and 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korman in view of Kim et al. (US 6,473,788).

Regarding claims 10-12, 53, 56-60, 122-125, 129-135, 137 and 147, Korman discloses all the limitations as stated above. Further, Korman discloses that the host computer monitors the individual Super-ATMs. On scheduled interval, the Super-ATMs may transmit data regarding diagnostic and maintenance information to the host computer. The host may then schedule technicians. In addition, Korman teaches that various elements of the Super-ATM work together to carry out non-traditional ATM transactions. For example, the network architecture permits any type of network-based service to be offered, including World Wide Web browser (column 7, line 54-column 8, line 12; column 9, lines 51-65).

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However, Korman does not expressly disclose a servicing person's terminal interconnected over a network and the central server provides information concerning the error condition via a Web page accessible to the servicing person's terminal.

Kim shows, in Fig. 1, a technical support organization LAN 19, a world wide web 6 and plural workstations and network administrator are connected to the LAN 15. Further, Kim teaches a method and apparatuses that provides a certain servicing and maintenance of a network peripheral device can be performed remotely, such as from a centralized service organization of a device manufacturer over a network, such as the Web.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add a method that a servicing person's terminal interconnected over a network and the central server provides information concerning the error condition via a Web page accessible to the servicing person's terminal, such as that suggested by Kim, to the method of Korman in order to discover the network device problem in advance and to enable the service technician to better prepare to repair the problem and to reduce the number of site visits by the technician.

Regarding claims 143 and 146, Korman discloses all the claim limitation as stated above except for a database that is accessible via query through a servicing person's terminal.

Kim shows, in Fig. 16, a Web page for providing servicing information generated by a network copier in response to service organization request. Further, Kim teaches that a service technician runs a web browser on workstation 1, connected to an HTTP server which is set up to provide HTML files related to maintenance communications.

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It would have been obvious to one ordinary skill in the art at the time the invention was made to add a database accessible via query through a servicing person's terminal, such as that suggested by Kim, in the system of Korman in order to discover the network device problem in advance and to enable the service technician to better prepare to repair the problem and to reduce the number of site visits by the technician.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Korman et al. (US 6,318,536) discloses Multi-Transaction coin machine.

Grabowski et al. (US 6,305,602) discloses a light monitoring system and method for automated transaction machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

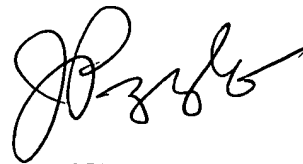
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST

April 14, 2004



JOHN PEZZLO
PRIMARY EXAMINER